

Side actuated, through hole DIP switches

Features

Optimized Mechanical Features

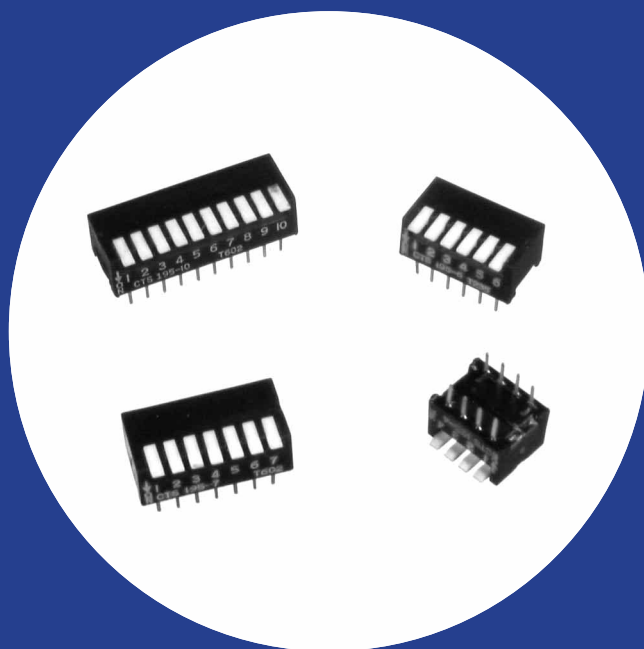
- SPST switching functions
- Enclosed actuators shield contacts from foreign particles throughout life of switch
- Reliable tape top seal optional/bottom epoxy seal standard
- Standard 2.54mm (.100") x 7.62mm (.300") DIP centers
- Complete marking on front side includes all information: ON direction, pole number, logo, part number and date code

Optimized Contact System

- Contact wiping on make and break
- Lock-over-center design provides positive detent action
- Optimized, active contact design incorporating a dimple-to-flat surface wiping interface with high contact force
- Insert molded base halves, of high temperature plastic, ensure mechanical integrity of contacts and terminals through soldering operations

Materials

- All U.L. 94 V-O plastics used
- Series 194 – gold plated contacts
- Series 195 – tin-lead plated contacts



U.S. Patent # 4,389,549

Series 194 – Premium Gold Plated Contacts
Series 195 – Economical Tin-Lead Plated Contacts

Electrical and Mechanical Specifications

Switch Function

Single pole single throw

Switch Contact Resistance

Switch Series	Initial, max.	End of life, max.
194	50 milliohms	100 milliohms
195	100 milliohms	500 milliohms

Insulation Resistance

1,000 megohms minimum across open switch
1,000 megohms minimum between adjacent closed switches

Dielectric Strength

500 VAC minimum for 1 minute between adjacent switches

Nonswitching Rating

100 mA or 50 VDC

Switch Capacitance

5.0 pF maximum between adjacent switches

Operating Temperature

–40°C to +85°C

Actuation Life

Series 194 – 7,000 cycles switching 50 mA @ 24 VDC
Series 195 – 2,000 cycles switching 50 mA @ 24 VDC

Allowable Solder Time

Up to 4 seconds with 260°C solder

Vibration

No mechanical damage or changes of switch settings during or after testing, when tested in three mutually perpendicular planes at 10-50 Hz sweep or at 60 Hz constant vibration

Shock

No mechanical damage or changes of switch settings with 25 G applied

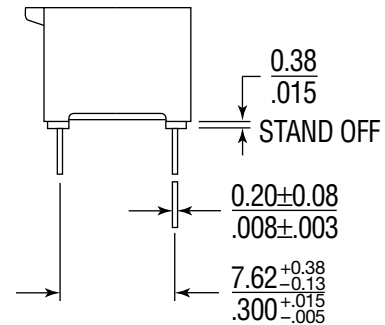
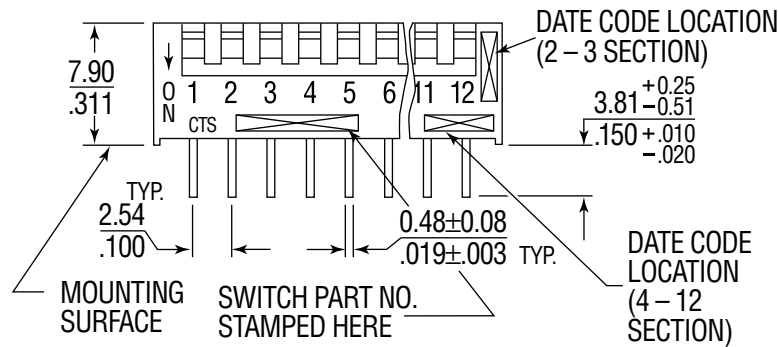
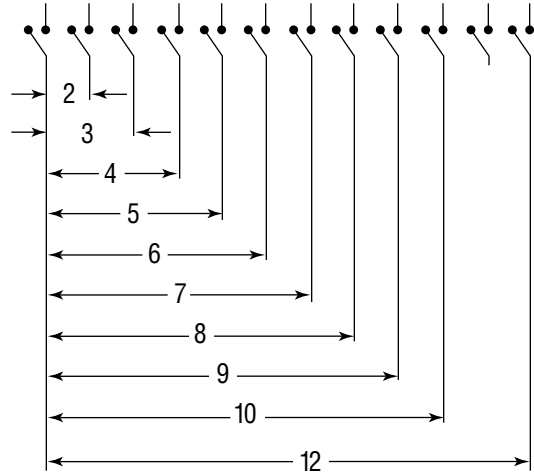
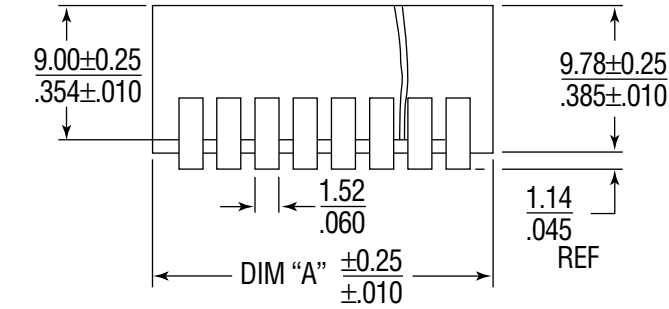
Sealing

Bottom epoxy seal standard
Top tape seal optional

Marking

Special side or top marking available-consult CTS

CTS SERIES 194/195



DIMENSION: $\frac{\text{MM}}{\text{INCH}}$

Ordering Information

"A" Overall Dimension	No. of Switch Sections
7.26 / .286	2
9.80 / .386	3
12.34 / .486	4
14.88 / .586	5
17.42 / .686	6
19.96 / .786	7
22.50 / .886	8
25.04 / .986	9
27.58 / 1.086	10
32.66 / 1.286	12

Part Number Code For Ordering

XXX - **XX** **M** **S** **T**
 Series 194
 Series 195
 XX: Number of Positions
 M: Medium Length Actuator
 S: Bottom Epoxy Seal
 T: Top Tape Seal (optional)
 Example: 195-8MST

Order From:

CTS CORPORATION, ELECTROCOMPONENTS / 1601 Mishawaka Street / Elkhart, Indiana 46514
 North America Toll Free (888) 287-4690 / (219) 296-6700 / FAX: (219) 293-1240 <http://www.ctscorp.com>

CTS COMPONENTS TAIWAN, LTD. / 7, Central 6th Road (Chung Liu Road) / P.O. Box 26-20
 Kaohsiung Export Processing Zone / Kaohsiung, Taiwan, Rep. of China
 (07) 8216145 / FAX: (07) 8417642.8110040